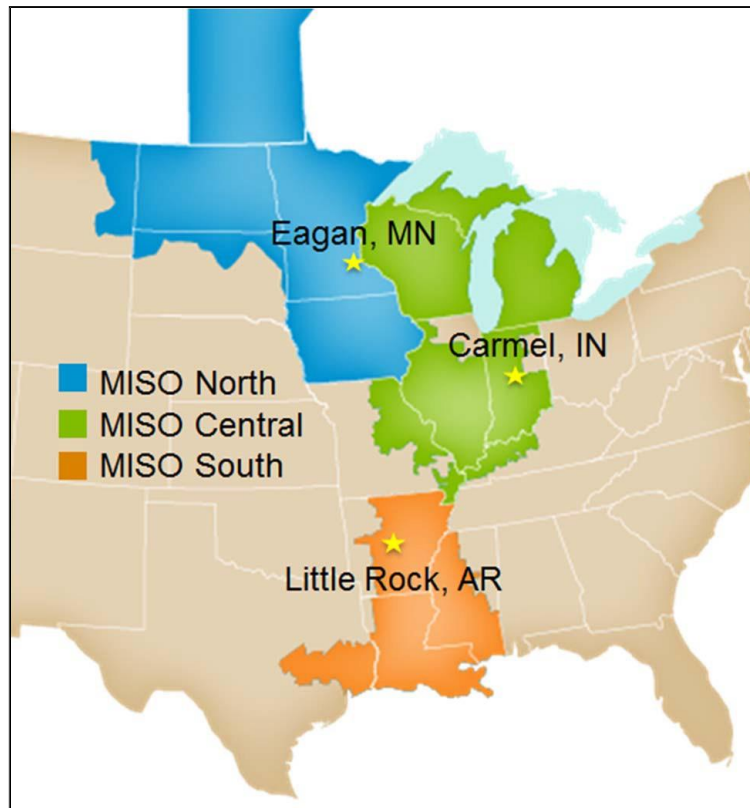




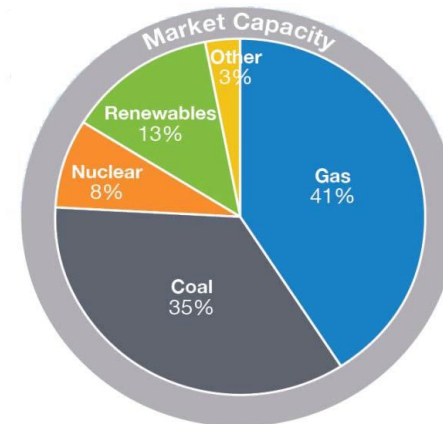
2021 Summer Readiness Workshop

June 15th , 2021

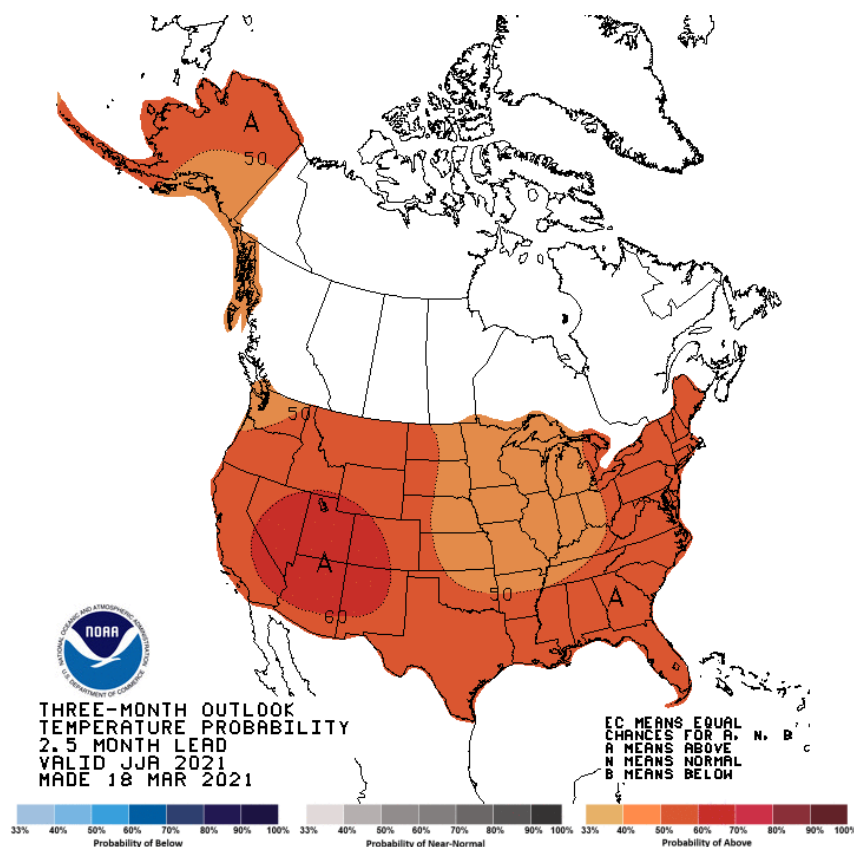
MISO is an independent, non-profit organization responsible for maintaining reliable and cost-effective delivery of power in 15 states and one Canadian province



MISO by-the-numbers	
High Voltage Transmission	65,800 miles
Generation Capacity	174,000 MW
Peak System Demand	127,125 MW
Customers Served	42 million



146 GW of resources are projected to cover demand and outages for Summer 2021 with warmer than normal temperatures forecasted throughout the MISO footprint



MISO Preliminary 2021 Summer Forecast

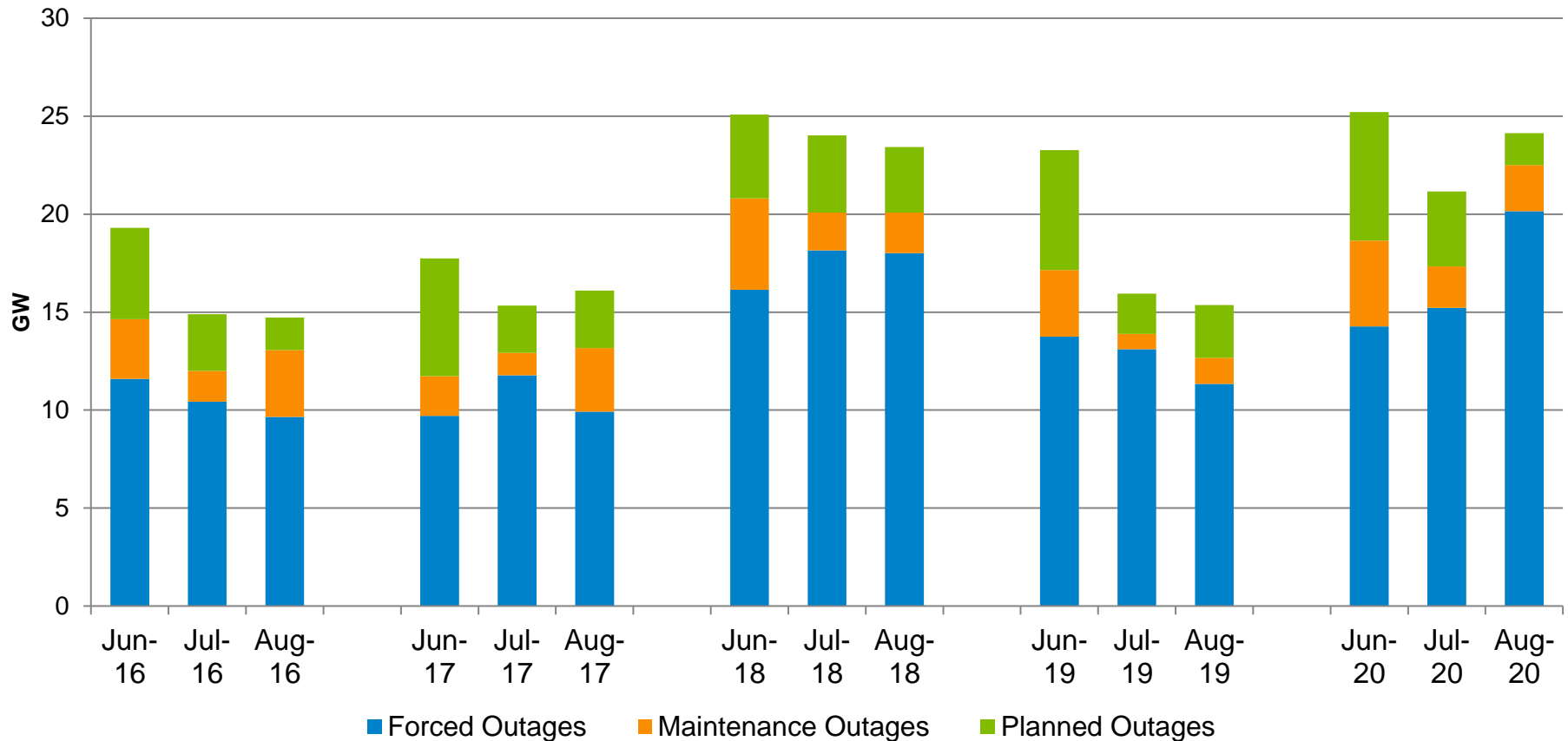
Summer Coincident
Peak Forecast 122 GW
+ *Transmission Losses*

Total Projected Available
Capacity* 146 GW

***All-time Summer Peak Load:
127 GW on July 20, 2011***

NOAA forecasts below average levels of precipitation in LRZs 1-3 & above average levels in the southeast pocket of the MISO footprint

Cumulative generation outages of Summer 2020 during monthly peak remain high relative to the 5-year average



	Forced Outages (GW)	Total Outages (GW)
Average of 15 monthly peak hours	13.5	19.7
Maximum peak day	20.1	25.2

Range of uncertainty in generation availability and load forecasts capture risks utilized in the Summer 2021 scenarios

Generation

- **Probable Generation Capacity**
 - Removes 5-year average volume of resource outages¹ during monthly peak (planned, maintenance, and forced)
- **Low Generation Capacity (High Outage)**
 - Removes 5-year maximum volume of resource outages during monthly peak (planned, maintenance, and forced), typically because of non-normal weather conditions

Load

- **Probable Load Forecast**
 - 50/50 forecast², provided by Market Participants
- **High Load Forecast**
 - 90/10 forecast³



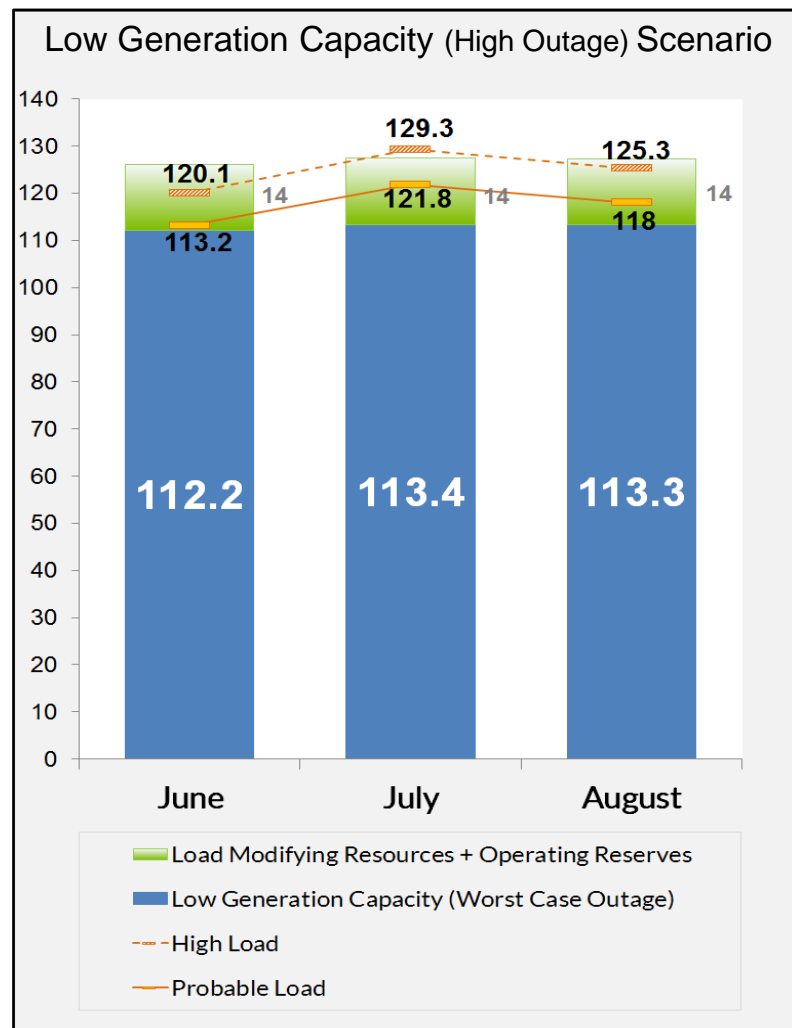
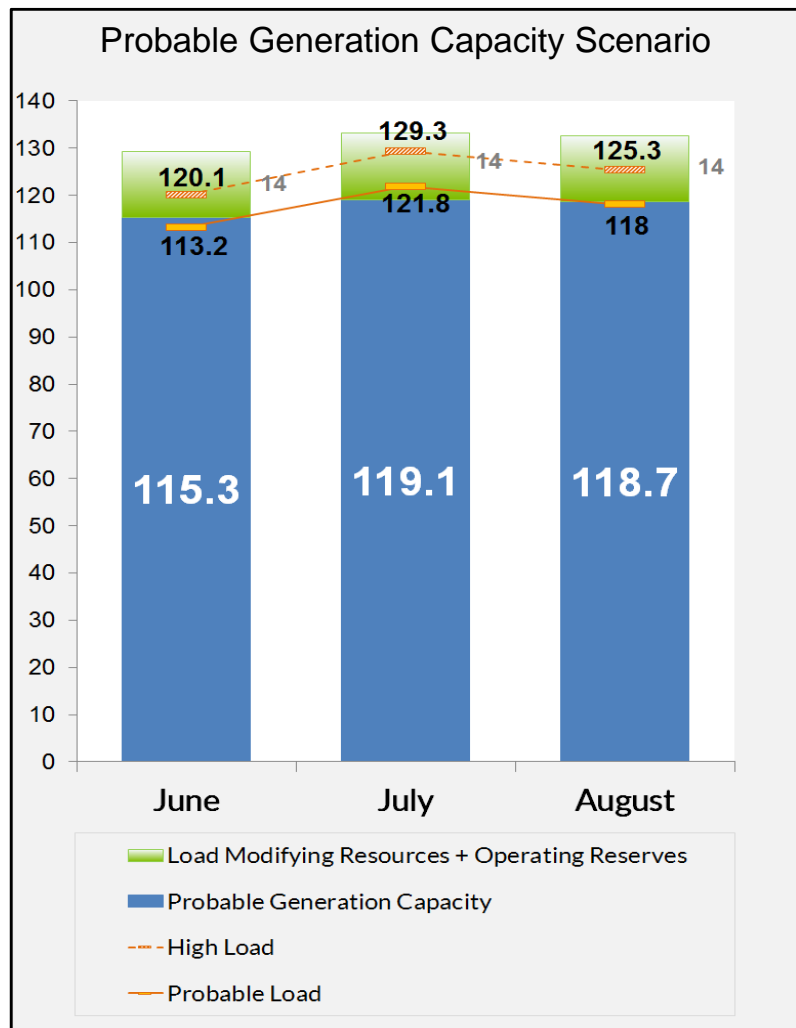
¹ Based on 5-year historical outage information provided by Resource Owners

² 50% chance of the actual load being lower and 50% chance of the actual load being higher

³ 90% of the actual load being lower and 10% chance of the actual load being higher

A combination of both high load and high outages could drive operational challenges for the Summer 2021 season

Summer 2021 Resource Adequacy Projections – System-wide





Questions?



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